

**NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR MANAGEMENT**

**The Pillsbury Company
707 Pillsbury Lane
New Albany, Indiana 47150**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 043-10995-00050	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary refrigerated baked goods production process.

Authorized Individual: David Woolley
Source Address: 707 Pillsbury Lane, New Albany, Indiana 47150
Mailing Address: 707 Pillsbury Lane, New Albany, Indiana 47150
Phone Number: 812-944-8411
SIC Code: 2045
County Location: Floyd
County Status: Moderate Nonattainment for ozone
Attainment area for all other criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset Rules

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and/or operate the following emissions units and pollution control devices:

- (a) three (3) natural gas-fired pest control heaters, designated Nos. 1, 2, and 3, with maximum heat input rates of 4.5, 2.725, and 2.725 million (MM) British thermal units (Btu) per hour, respectively, exhausting through Stack Nos. 155, 156, and 157, respectively;
- (b) one (1) pneumatic flour conveyance and storage system with dust collector DC01034, exhausting through Stack No. 150;
- (c) one (1) pneumatic dusting flour conveyance and storage system with dust collector RC16002, exhausting through Stack No. 151 (which now exhausts inside the building);
- (d) one (1) pneumatic sugar conveyance and storage system with a sock vent which exhausts inside the building (Note: this facility originally was equipped with dust collector DC02039 and exhausted through Stack No. 152. However, the stack was replaced with a sock vent and now exhausts inside the building);
- (e) two (2) pneumatically conveyed ribbon blenders with dust collectors DC10005 and DC10023 exhausting through Stack Nos. 153 and 154, respectively;
- (f) a vacuum system with three (3) dust collectors designated BL11052, BL12092, and BL01005 exhausting through Stack Nos. 160, 162, and 163, respectively;
- (g) one (1) WWTP flare, with a maximum heat input capacity of 1.0 MMBtu per hour;
- (h) three (3) natural gas-fired pest control heaters, designated Nos. 4, 5, and 6, each with maximum heat input rates of 2.0 MMBtu per hour, exhausting through Stack Nos. 85, 135, and 140, respectively;

- (i) one (1) natural gas-fired pest control heater, designated No. 7, with a maximum heat input rate of 0.75 MMBtu per hour, exhausting through Stack No. 142;
- (j) two (2) natural gas-fired boilers, designated Nos. 1 and 2, each with maximum heat input rates of 10.1 MMBtu per hour, exhausting through Stack Nos. 125 and 126, respectively;
- (k) one (1) natural gas-fired boiler, designated No. 3, with a maximum heat input rate of 12.5 MMBtu per hour, exhausting through Stack No. 127;
- (l) one (1) natural gas-fired boiler, designated No. 4, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through Stack No. 128;
- (m) one (1) pneumatically conveyed cookie blender with dust collector DC62, exhausting through Stack No. 8;
- (n) one (1) pneumatically conveyed vertical tower bin, designated No. 4, with dust collector DC04, exhausting through Stack No. 20;
- (o) one (1) pneumatically conveyed vertical tower bin, designated No. 9, with dust collector DC09, exhausting through Stack No. 21;
- (p) one (1) pneumatically conveyed dusting flour reclaim bin with dust collector DC37, exhausting through Stack No. 37;
- (q) one (1) pneumatically conveyed horizontal bin with dust collector DC30, exhausting through Stack No. 48;
- (r) one (1) pneumatically conveyed sugar grinding bin, designated No. 58, with dust collector DC50, exhausting through Stack No. 55;
- (s) one (1) pneumatically conveyed flour cooler with dust collector DC61, exhausting through Stack No. 61;
- (t) two (2) pneumatically conveyed flour reclaim collectors, designated C1L and C2L, with dust collectors DC17 and DC16, respectively, exhausting through Stack Nos. 66 and 67, respectively;
- (u) one (1) pneumatically conveyed flour reclaim collector, designated PCL, with dust collector DC15, exhausting through Stack No. 68;
- (v) one (1) pneumatically conveyed flour reclaim collector, designated HJL, with dust collector DC18, exhausting through Stack No. 69;
- (w) one (1) pneumatically conveyed flour reclaim collector, designated BRL, with dust collector DC24, exhausting through Stack No. 71;
- (x) one (1) pneumatically conveyed penthouse collector, designated PC, with dust collector DC38, exhausting through Stack No. 98a;
- (y) one (1) pneumatically conveyed surge bin, designated PC, with dust collector DC48, exhausting through Stack No. 98b;
- (z) two (2) pneumatically conveyed starch bins, designated Nos. 12 and 13, with dust collectors DC12 and DC13, respectively, exhausting through Stack Nos. 104 and 105, respectively;

- (aa) one (1) pneumatically conveyed flour bin, designated Western, with dust collector DC36, exhausting through Stack No. 108;
- (bb) three (3) pneumatically conveyed unloader bins, designated Nos. 1, 2, and 3, with dust collectors DC54, DC53, and DC52, respectively, exhausting through Stack Nos. 139, 137, and 138, respectively;
- (cc) four (4) scrubbers, designated PKL Rotoclone, BRL, C1L, and C2L, for removal of carbon dioxide refrigerant from the employee occupied area, exhausting through Stack Nos. 52, 60, 70, and 65, respectively;
- (dd) one (1) Safety Kleen cold cleaner degreaser, designated No. 87, exhausting inside, using a maximum of 0.056 gallons of solvent per day;
- (ee) one (1) 12,000 gallon No. 2 fuel oil storage tank, exhausting through Stack No. 12, constructed in 1978;
- (ff) two (2) 14,000 gallon alcohol storage tanks, exhausting through Stack Nos. 13 and 14, respectively, constructed in 1982 and 1985, respectively; and
- (gg) one (1) stick welding operation.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of PM, PM-10, SO₂, and CO is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

C.2 Emission Offset Minor Source Status [326 IAC 2-3]

- (a) The total source potential to emit of VOC and NO_x is less than 100 tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) will not apply.
- (b) Any change or modification which may increase potential to emit VOC or NO_x to 100 tons per year, from the equipment covered in this permit, shall require an Emission Offset pursuant to 326 IAC 2-3, before such change may occur.

C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of [326 IAC 2-6.1-6] whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
 - (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
 - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.12 Maintenance of Monitoring Equipment [IC 13-14-1-13]

-
- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
 - (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps

shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the

date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.18 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.19 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;

- (5) The results of such analyses; and
- (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable

deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) A malfunction as described in 326 IAC 1-6-2; or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions unit Description

- (a) three (3) natural gas-fired pest control heaters, designated Nos. 1, 2, and 3, with maximum heat input rates of 4.5, 2.725, and 2.725 million (MM) British thermal units (Btu) per hour, respectively, exhausting through Stack Nos. 155, 156, and 157, respectively;
- (h) three (3) natural gas-fired pest control heaters, designated Nos. 4, 5, and 6, each with maximum heat input rates of 2.0 MMBtu per hour, exhausting through Stack Nos. 85, 135, and 140, respectively;
- (i) one (1) natural gas-fired pest control heater, designated No. 7, with a maximum heat input rate of 0.75 MMBtu per hour, exhausting through Stack No. 142;
- (j) two (2) natural gas-fired boilers, designated Nos. 1 and 2, each with maximum heat input rates of 10.1 MMBtu per hour, exhausting through Stack Nos. 125 and 126, respectively;
- (k) one (1) natural gas-fired boiler, designated No. 3, with a maximum heat input rate of 12.5 MMBtu per hour, exhausting through Stack No. 127; and
- (l) one (1) natural gas-fired boiler, designated No. 4, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through Stack No. 128.

Emission Limitations and Standards

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (d) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, in this case, the four natural gas-fired boilers (Nos. 1, 2, 3, and 4), shall in no case exceed 0.8 pounds of particulate matter per million British thermal units heat input. This is equivalent to a PM emission limit for each of boilers No. 1, 2, 3, and 4 of 8.1, 8.1, 10.0, and 1.28 pounds per hour, respectively.

Compliance Determination Requirements

D.1.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions unit Description

- (b) one (1) pneumatic flour conveyance and storage system with dust collector DC01034, exhausting through Stack No. 150;
- (c) one (1) pneumatic dusting flour conveyance and storage system with dust collector RC16002, exhausting through Stack No. 151 (which now exhausts inside the building);
- (d) one (1) pneumatic sugar conveyance and storage system with a sock vent which exhausts inside the building (Note: this facility originally was equipped with dust collector DC02039 and exhausted through Stack No. 152. However, the stack was replaced with a sock vent and now exhausts inside the building);
- (e) two (2) pneumatically conveyed ribbon blenders with dust collectors DC10005 and DC10023 exhausting through Stack Nos. 153 and 154, respectively;
- (f) a vacuum system with three (3) dust collectors designated BL11052, BL12092, and BL01005 exhausting through Stack Nos. 160, 162, and 163, respectively;
- (m) one (1) pneumatically conveyed cookie blender with dust collector DC62, exhausting through Stack No. 8;
- (n) one (1) pneumatically conveyed vertical tower bin, designated No. 4, with dust collector DC04, exhausting through Stack No. 20;
- (o) one (1) pneumatically conveyed vertical tower bin, designated No. 9, with dust collector DC09, exhausting through Stack No. 21;
- (p) one (1) pneumatically conveyed dusting flour reclaim bin with dust collector DC37, exhausting through Stack No. 37;
- (q) one (1) pneumatically conveyed horizontal bin with dust collector DC30, exhausting through Stack No. 48;
- (r) one (1) pneumatically conveyed sugar grinding bin, designated No. 58, with dust collector DC50, exhausting through Stack No. 55;
- (s) one (1) pneumatically conveyed flour cooler with dust collector DC61, exhausting through Stack No. 61;
- (t) two (2) pneumatically conveyed flour reclaim collectors, designated C1L and C2L, with dust collectors DC17 and DC16, respectively, exhausting through Stack Nos. 66 and 67, respectively;
- (u) one (1) pneumatically conveyed flour reclaim collector, designated PCL, with dust collector DC15, exhausting through Stack No. 68;
- (v) one (1) pneumatically conveyed flour reclaim collector, designated HJL, with dust collector DC18, exhausting through Stack No. 69;

- (w) one (1) pneumatically conveyed flour reclaim collector, designated BRL, with dust collector DC24, exhausting through Stack No. 71;
- (x) one (1) pneumatically conveyed penthouse collector, designated PC, with dust collector DC38, exhausting through Stack No. 98a;
- (y) one (1) pneumatically conveyed surge bin, designated PC, with dust collector DC48, exhausting through Stack No. 98b;
- (z) two (2) pneumatically conveyed starch bins, designated Nos. 12 and 13, with dust collectors DC12 and DC13, respectively, exhausting through Stack Nos. 104 and 105, respectively;
- (aa) one (1) pneumatically conveyed flour bin, designated Western, with dust collector DC36, exhausting through Stack No. 108;
- (bb) three (3) pneumatically conveyed unloader bins, designated Nos. 1, 2, and 3, with dust collectors DC54, DC53, and DC52, respectively, exhausting through Stack Nos. 139, 137, and 138, respectively;
- (cc) four (4) scrubbers, designated PKL Rotoclone, BRL, C1L, and C2L, for removal of carbon dioxide refrigerant from the employee occupied area, exhausting through Stack Nos. 52, 60, 70, and 65, respectively; and
- (gg) one (1) stick welding operation.

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the facilities designated as items (b) through (f) and (m) through (bb) listed above shall not exceed the following pounds per hour limitations:

Stack ID	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
8	0.88
20	40.04
21	40.04
37	37.77
48	40.04
55	0.82
61	14.22
66	2.91
67	2.91
68	0.88
69	2.91
71	2.91
98a	27.90

Stack ID	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
98b	27.90
104	27.90
105	27.90
108	2.91
137	40.04
138	22.27
139	30.51
150	27.90
151	7.58
152	22.27
153	19.18
154	19.18
160	5.38
162	7.37
163	30.51

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3-2, the dust collectors for the pneumatic conveyance steps shall be in operation at all times when raw materials are being conveyed and the dust collectors for the vacuum system shall be in operation at all times that the vacuum system is in operation.
- (c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the welding operation shall not exceed 0.0012 pounds per hour when operating at a process weight rate of 0.01 pounds per hour based on the above equation.

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these emissions units and their control devices.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emissions units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.4 Particulate Matter (PM)

The dust collectors for PM control shall be in operation at all times when the pneumatic conveyance steps or the vacuum system are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of the dust collector stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the dust collectors (DC62, DC04, DC09, DC37, DC30, DC50, DC61, DC17, DC16, DC15, DC18, DC24, DC38, DC48, DC12, DC13, DC36, DC53, DC52, DC54, DC01034, DC10005, DC10023, BL11052, BL12092, and BL01005) used in conjunction with the pneumatic conveyance steps and the vacuum system, at least once weekly when the pneumatic conveyance steps and the vacuum system are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collectors shall be maintained within the ranges listed below or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

Baghouse ID	Pressure Drop Range (inches of water)
DC62	7.0 to 10.0
DC04	2.0 to 5.0
DC09	3.0 to 6.0
DC37	2.0 to 5.0
DC30	1.0 to 4.0
DC50	2.0 to 5.0
DC61	2.0 to 5.0
DC17	2.0 to 5.0

DC16	2.0 to 5.0
DC15	2.0 to 5.0
DC18	2.0 to 5.0
DC24	2.0 to 5.0
DC38	2.0 to 5.0
DC48	2.0 to 5.0
DC12	2.0 to 5.0
DC13	2.0 to 5.0
DC36	2.0 to 5.0
DC53	2.0 to 5.0
DC52	2.0 to 5.0
DC54	2.0 to 5.0
DC01034	2.0 to 5.0
DC10005	2.0 to 5.0
DC10023	2.0 to 5.0
BL11052	2.0 to 5.0
BL12092	2.0 to 5.0
BL01005	2.0 to 5.0

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the pneumatic conveyance steps and the vacuum system when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have

been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the dust collector stack exhausts.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure for each dust collector; and
 - (B) Cleaning cycle: frequency and differential pressure
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions unit Description

- | |
|--|
| (dd) one (1) Safety Kleen cold cleaner degreaser, designated No. 87, exhausting inside, using a maximum of 0.056 gallons of solvent per day. |
|--|

Emission Limitations and Standards

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-5(a)]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser emissions unit shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a emissions unit for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage emissions unit must be internal such that articles are enclosed under the cover while draining. The drainage emissions unit may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

- (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning emissions unit shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.3.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.4

EMISSIONS UNIT OPERATION CONDITIONS

Emissions unit Description

- (ee) one (1) 12,000 gallon No. 2 fuel oil storage tank, exhausting through Stack No. 12, constructed in 1978; and
- (ff) two (2) 14,000 gallon alcohol storage tanks, exhausting through Stack Nos. 13 and 14, respectively, constructed in 1982 and 1985, respectively.

Emission Limitations and Standards

D.4.1 Volatile Organic Compounds (VOCs) [326 IAC 12] [40 CFR 60.110b, Subpart Kb]

Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the one (1) 14,000 gallon alcohol storage tank exhausting through Stack No. 13, with a design capacity less than 75 cubic meters, is subject to 40 CFR Part 60.116b, paragraph (b) which requires record keeping.

D.4.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) 14,000 gallon alcohol storage tank exhausting through Stack No. 13 and any control devices.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.4.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.4.4 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain permanent records at the source in accordance with (1) and (2) below:
 - (1) the dimension of the storage vessel; and
 - (2) an analysis showing the capacity of the storage vessel.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? _____, 25 TONS/YEAR SULFUR DIOXIDE ? _____, 25 TONS/YEAR NITROGEN OXIDES ? _____, 25 TONS/YEAR VOC ? _____, 25 TONS/YEAR HYDROGEN SULFIDE ? _____, 25 TONS/YEAR TOTAL REDUCED SULFUR ? _____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ? _____, 25 TONS/YEAR FLUORIDES ? _____, 100 TONS/YEAR CARBON MONOXIDE ? _____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ? _____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ? _____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ? _____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ? _____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: The Pillsbury Company PHONE NO. (812) 944-8411
LOCATION: (CITY AND COUNTY) New Albany, Floyd County
PERMIT NO. MSOP043-10995 AFS PLANT ID: 043-00050 AFS POINT ID: _____ INSP: Joe Foyst
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

PAGE 1 OF 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for**

the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: The Pillsbury Company
Source Location: 707 Pillsbury Lane, New Albany, Indiana 47150
County: Floyd
SIC Code: 2045
Operation Permit No.: MSOP 043-10995-00050
Permit Reviewer: Trish Earls/EVP

The Office of Air Management (OAM) has reviewed an application from The Pillsbury Company relating to the construction and operation of a refrigerated baked goods production process.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) three (3) natural gas-fired pest control heaters, designated Nos. 1, 2, and 3, with maximum heat input rates of 4.5, 2.725, and 2.725 million (MM) British thermal units (Btu) per hour, respectively, exhausting through Stack Nos. 155, 156, and 157, respectively;
- (b) one (1) pneumatic flour conveyance and storage system with dust collector DC01034, exhausting through Stack No. 150;
- (c) one (1) pneumatic dusting flour conveyance and storage system with dust collector RC16002, exhausting through Stack No. 151 (which now exhausts inside the building);
- (d) one (1) pneumatic sugar conveyance and storage system with a sock vent which exhausts inside the building (Note: this facility originally was equipped with dust collector DC02039 and exhausted through Stack No. 152. However, the stack was replaced with a sock vent and now exhausts inside the building);
- (e) two (2) pneumatically conveyed ribbon blenders with dust collectors DC10005 and DC10023 exhausting through Stack Nos. 153 and 154, respectively;
- (f) a vacuum system with three (3) dust collectors designated BL11052, BL12092, and BL01005 exhausting through Stack Nos. 160, 162, and 163, respectively; and
- (g) one (1) WWTP flare, with a maximum heat input capacity of 1.0 MMBtu per hour.

Note: The oil separator exhausting through Stack No. 158, which was included in the registration issued to this source (CP-043-9162-00050) on December 2, 1997, was never installed because the operation was deleted from the process.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (a) three (3) natural gas-fired pest control heaters, designated Nos. 4, 5, and 6, each with maximum heat input rates of 2.0 MMBtu per hour, exhausting through Stack Nos. 85, 135, and 140, respectively;
- (b) one (1) natural gas-fired pest control heater, designated No. 7, with a maximum heat input rate of 0.75 MMBtu per hour, exhausting through Stack No. 142;
- (c) two (2) natural gas-fired boilers, designated Nos. 1 and 2, each with maximum heat input rates of 10.1 MMBtu per hour, exhausting through Stack Nos. 125 and 126, respectively;
- (d) one (1) natural gas-fired boiler, designated No. 3, with a maximum heat input rate of 12.5 MMBtu per hour, exhausting through Stack No. 127;
- (e) one (1) natural gas-fired boiler, designated No. 4, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through Stack No. 128;
- (f) one (1) pneumatically conveyed cookie blender with dust collector DC62, exhausting through Stack No. 8;
- (g) one (1) pneumatically conveyed vertical tower bin, designated No. 4, with dust collector DC04, exhausting through Stack No. 20;
- (h) one (1) pneumatically conveyed vertical tower bin, designated No. 9, with dust collector DC09, exhausting through Stack No. 21;
- (i) one (1) pneumatically conveyed dusting flour reclaim bin with dust collector DC37, exhausting through Stack No. 37;
- (j) one (1) pneumatically conveyed horizontal bin with dust collector DC30, exhausting through Stack No. 48;
- (k) one (1) pneumatically conveyed sugar grinding bin, designated No. 58, with dust collector DC50, exhausting through Stack No. 55;
- (l) one (1) pneumatically conveyed flour cooler with dust collector DC61, exhausting through Stack No. 61;
- (m) two (2) pneumatically conveyed flour reclaim collectors, designated C1L and C2L, with dust collectors DC17 and DC16, respectively, exhausting through Stack Nos. 66 and 67, respectively;
- (n) one (1) pneumatically conveyed flour reclaim collector, designated PCL, with dust collector DC15, exhausting through Stack No. 68;
- (o) one (1) pneumatically conveyed flour reclaim collector, designated HJL, with dust collector DC18, exhausting through Stack No. 69;
- (p) one (1) pneumatically conveyed flour reclaim collector, designated BRL, with dust collector DC24, exhausting through Stack No. 71;
- (q) one (1) pneumatically conveyed penthouse collector, designated PC, with dust collector DC38, exhausting through Stack No. 98a;

- (r) one (1) pneumatically conveyed surge bin, designated PC, with dust collector DC48, exhausting through Stack No. 98b;
- (s) two (2) pneumatically conveyed starch bins, designated Nos. 12 and 13, with dust collectors DC12 and DC13, respectively, exhausting through Stack Nos. 104 and 105, respectively;
- (t) one (1) pneumatically conveyed flour bin, designated Western, with dust collector DC36, exhausting through Stack No. 108;
- (u) three (3) pneumatically conveyed unloader bins, designated Nos. 1, 2, and 3, with dust collectors DC54, DC53, and DC52, respectively, exhausting through Stack Nos. 139, 137, and 138, respectively;
- (v) four (4) scrubbers, designated PKL Rotoclone, BRL, C1L, and C2L, for removal of carbon dioxide refrigerant from the employee occupied area, exhausting through Stack Nos. 52, 60, 70, and 65, respectively;
- (w) one (1) Safety Kleen cold cleaner degreaser, designated No. 87, exhausting inside, using a maximum of 0.056 gallons of solvent per day.
- (x) one (1) 12,000 gallon No. 2 fuel oil storage tank, exhausting through Stack No. 12, constructed in 1978;
- (y) two (2) 14,000 gallon alcohol storage tanks, exhausting through Stack Nos. 13 and 14, respectively, constructed in 1982 and 1985, respectively; and
- (z) one (1) stick welding operation.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registration No. CP-043-9162-00050, issued on December 2, 1997.

All conditions from previous approvals were incorporated into this permit.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the dust collectors/baghouses be considered as an integral part of the various pneumatically conveyed bins and collectors:

- (a) These pieces of equipment are "filter/collectors" which collect and return raw material and ingredients collected to the process. The raw materials are conveyed pneumatically.
- (b) The process could not be operated without the dust collectors also being in operation since the dust collectors are required to ensure that the all of the raw materials are used in the process.

IDEM, OAM has evaluated the justifications and agreed that the dust collectors/baghouses will be considered as an integral part of the process. Therefore, the permitting level will be determined using the potential to emit after the dust collectors/baghouses. Operating conditions in the proposed permit will specify that the dust collectors/baghouses shall operate at all times when the pneumatic conveyance system is in operation.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
8	DC62	38	0.67	800	ambient
12	Fuel Oil Tank	13	0.33	N/A	ambient
13	Alcohol Tank	15	0.5	N/A	ambient
14	Alcohol Tank	15	0.5	N/A	ambient
20	DC04	10	1.67x1.0	2600	ambient
21	DC09	10	1.67x1.0	4000	ambient
37	DC37	Bldg. vent	0.5x0.58	800	ambient
48	DC30	24	1.33	5157	ambient
52	PKL Rotoclone	40	0.83	2000	ambient
55	DC50	43	0.67	850	ambient
60	Scrubber BRL	24	0.83	1200	ambient
61	DC61	45	0.83x0.83	756	ambient
65	Scrubber C2L	30	1.5	3000	ambient
66	DC17	24	0.83	2500	ambient
67	DC16	24	0.83	2700	ambient
68	DC15	45	0.83	2250	ambient
69	DC18	26	0.83	2800	ambient
70	Scrubber C1L	28	1.0	1200	ambient
71	DC24	27	0.83	2100	ambient
85	Pest Control #4	25	1.17	500	752
98a	DC38	23	0.83	2800	ambient
98b	DC48	23	0.67x0.67	750	ambient
104	DC12	10	0.83	1800	ambient
105	DC13	10	0.83	1800	ambient
108	DC36	23	1.67x2.17	12000	ambient
125	Boiler #1	43	2.17	2020	355
126	Boiler #2	43	2.17	2020	355
127	Boiler #3	43	1.67	2500	355
128	Boiler #4	20	1.0	320	355
135	Pest Control #5	28	1.17	500	752
137	DC53	22	0.67	1500	ambient
138	DC52	22	1.17	1500	ambient
139	DC54	22	1.17	1500	ambient
140	Pest Control #6	40	1.17	500	752
142	Pest Control #7	40	1.17	150	752
150	DC01034	50	1.33	1600	ambient
153	DC10005	81	1.33	2000	ambient
154	DC10023	81	1.33	2000	ambient
155	Pest Control #1	81	1.33	1700	300
156	Pest Control #2	81	1.17	850	300
157	Pest Control #3	81	1.17	1000	300
159	WWTP Flare	12.67	1.5	25	1200
160	BL11052	40	0.5	200	ambient

162	BL12092	40	0.67	300	ambient
163	BL01005	22	0.67	1285	ambient

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on May 25, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (9 pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	53.02
PM-10	54.29
SO ₂	0.13
VOC	1.95
CO	20.38
NO _x	22.63

HAP's	Potential To Emit (tons/year)
Hexane	0.13
TOTAL	0.14

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM10 is equal to or greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

(b) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Natural Gas Combustion	0.43	1.70	0.13	1.23	18.76	22.33	0.14
Flare	0.73	0.73	0.0	0.39	1.62	0.30	0.0
Conveying and Handling	51.84	51.84	0.0	0.0	0.0	0.0	0.0
Degreasing and Welding	0.02	0.02	0.0	0.33	0.0	0.0	0.0
Total Emissions	53.02	54.29	0.13	1.95	20.38	22.63	0.14

County Attainment Status

The source is located in Floyd County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	moderate nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Floyd County has been designated as moderate nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Floyd County has been classified as attainment or unclassifiable for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (ton/yr)
PM	18.1
PM10	18.1
SO ₂	0.0
VOC	0.7
CO	2.8
NO _x	5.9

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is not in one of the 28 listed source categories.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification*	46.66	47.67	0.11	1.32	15.10	17.98
PSD or Offset Threshold Level	250	250	250	100	250	100

* Proposed Modification emissions include emissions from those units previously unpermitted.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD and Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply, and pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to the entire source.

Federal Rule Applicability

- (a) The three (3) boilers, designated as Boilers #1, #2, and #3, are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc), because Boilers #1 and #2 were constructed in 1959, and Boiler #3 was constructed in 1966, which is prior to the rule applicability date of June 9, 1989.
- (b) The one (1) 12,000 gallon No. 2 fuel oil storage tank and the one (1) 14,000 alcohol storage tank exhausting through Stack No. 14 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Kb), because each tank was constructed prior to the rule applicability date of July 23, 1984. The one (1) 14,000 gallon alcohol storage tank exhausting through Stack No. 13 is subject to 40 CFR Subpart Kb because it was constructed in 1985 and has a design capacity greater than 40 cubic meters. However, since the tank has a design capacity less than 75 cubic meters, it is subject to only 40 CFR Part 60.116b, paragraph (b) which requires record keeping.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_x and is located in Floyd County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

State Rule Applicability - Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The four (4) boilers (Nos. 1, 2, 3, and 4), each constructed before September 21, 1983, are subject to 326 IAC 6-2-3. Pursuant to this rule, particulate emissions from indirect heating facilities existing and in operation before September 21, 1983, shall be limited by the following equation:

$$Pt = \underline{\hspace{1cm}} C \times a \times h \underline{\hspace{1cm}}$$

$$76.5 \times Q^{0.75} \times N^{0.25}$$

$$Pt = \frac{50 \times 0.67 \times 43}{76.5 \times 34.3^{0.75} \times 4^{0.25}} = 0.94 \text{ lb/MMBtu}$$

The allowable particulate emission rate from each of the boilers, based on the above equation, is 0.94 pound per MMBtu heat input. However, pursuant to 326 IAC 6-2-3(d), the allowable particulate emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.80 pound per MMBtu heat input. Therefore, the allowable PM emissions from each of the four (4) boilers is 0.80 pound per MMBtu heat input. This is equivalent to a PM emission limit for each of boilers No. 1, 2, 3, and 4 of 8.1, 8.1, 10.0, and 1.28 pounds per hour, respectively. The four (4) boilers are all in compliance with this limit (see Appendix A, page 4 of 9 for detailed compliance calculations).

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) emissions from each of the process steps shall be limited by the following equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The allowable limits for each of the process steps at the source are provided in the calculations in Appendix A, page 8 of 9. The throughputs at which the limits were calculated are trade secrets and are being kept confidential at the applicant's request. The potential emissions from each process step is less than the allowable emissions, therefore, the facilities are in compliance with the rule.

The PM emissions from the welding operation shall not exceed 0.009 pounds per hour when operating at a process weight rate of 0.2 pounds per hour based on the above equation. Potential PM emissions from this operation are less than the allowable, therefore, this operation is in compliance with this rule.

326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)

The Safety Kleen cold cleaner degreaser is subject to the requirements of this rule because the source is located in Floyd County.

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser emissions unit shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a emissions unit for draining cleaned articles. If the

solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage emissions unit must be internal such that articles are enclosed under the cover while draining. The drainage emissions unit may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning emissions unit shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The one (1) fuel oil storage tank and the two (2) alcohol storage tanks are not subject to this rule because they were each constructed prior to October 1, 1995, which is the applicability date of this rule.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source

according to Section 112 of the 1990 Clean Air Act Amendments.

- (b) See attached calculations for detailed air toxic calculations. (Appendix A, page 5 of 9)

Conclusion

The construction and operation of this refrigerated baked goods production process shall be subject to the conditions of the attached proposed **New Source Construction and Minor Source Operating Permit 043-10995-00050**.

Appendix A: Welding and Thermal Cutting

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Plt ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING											
Submerged Arc	0	0	0.036								0.000
Metal Inert Gas (MIG)(ER5154)	0	0	0.0241	0.00003		0.00001					0.000
Stick (E7018 electrode)	6	0.03	0.0211				0.004				0.000
Tungsten Inert Gas (TIG)(carbon steel)	0	0	0.0055								0.000
Oxyacetylene(carbon steel)	0	0	0.0055								0.000
EMISSION TOTALS							PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr							0.0042	0.00	0.00	0.00	0.00
Potential Emissions lbs/day							0.100	0.00	0.00	0.00	0.00
Potential Emissions tons/year							0.018	0.00	0.00	0.00	0.00

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

326 IAC 6-3-2 Allowable Emission Calculation

The following calculations determine compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

$$\begin{aligned}
 \text{limit} &= 4.1 * (0.0001^{0.67}) = 0.0086 \text{ lb/hr for entire welding operation} \\
 &= 0.0375 \text{ ton/yr}
 \end{aligned}$$

Potential PM emissions from the welding operation are 0.004 pounds per hour, therefore, this operation is in compliance with 326 IAC 6-3-2.

Appendix A: Process Particulate Emissions

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Plt ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

State Potential Emissions (tons/year)							
A. Baghouses - Previously Unpermitted							
Stack ID	Baghouse ID No.	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft ²)	Total Filter Area (ft ²)	Control Efficiency	Total (lbs/hr)	Total (tons/yr)
8	DC62	0.02000	4.60	173	99.90%	0.14	0.60
20	DC04	0.02000	7.50	347	99.90%	0.45	1.95
21	DC09	0.02000	11.50	347	99.90%	0.68	3.00
37	DC37	0.02000	8.89	90	99.90%	0.14	0.60
48	DC30	0.02000	15.00	347	99.90%	0.89	3.91
55	DC50	0.02000	6.00	198	99.90%	0.20	0.89
61	DC61	0.02000	11.00	70	99.90%	0.13	0.58
66	DC17	0.02000	7.20	347	99.90%	0.43	1.88
67	DC16	0.02000	6.15	488	99.90%	0.51	2.25
68	DC15	0.02000	12.50	90	99.90%	0.19	0.84
69	DC18	0.02000	6.18	453	99.90%	0.48	2.10
71	DC24	0.02000	8.27	254	99.90%	0.36	1.58
98a	DC38	0.02000	8.10	347	99.90%	0.48	2.11
98b	DC48	0.02000	16.67	45	99.90%	0.13	0.56
104	DC12	0.02000	5.20	347	99.90%	0.31	1.35
105	DC13	0.02000	5.20	347	99.90%	0.31	1.35
108	DC36	0.02000	6.88	1,742	99.90%	2.05	9.00
137	DC53	0.02000	4.51	397	99.90%	0.31	1.34
138	DC52	0.02000	4.00	460	99.90%	0.32	1.38
139	DC54	0.02000	4.00	452	99.90%	0.31	1.36
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60
B. Scrubbers - Previously Unpermitted							
Stack ID	Scrubber ID No.	Grain Loading per Actual Standard Cubic Foot of Outlet Air	Flow Rate (gpm)	Liquid to Air Ratio (gpm/1,000 acfm)	Control Efficiency	Total (lbs/hr)	Total (tons/yr)
52	PKL Rotoclone	0.00023	1.88	0.94	95.00%	0.08	0.34
60	BRL	0.00023	1.50	1.25	95.00%	0.05	0.20
65	C2L	0.00023	1.00	0.33	95.00%	0.12	0.51
70	C1L	0.00023	1.88	1.50	95.00%	0.05	0.21
C. Baghouses - Previously Permitted							
Stack ID	Baghouse ID No.	Grain Loading per Actual Cubic Foot of Outlet Air	Exhaust Flow Rate (acfm)	Control Efficiency		Total (lbs/hr)	Total (tons/yr)
150	DC01034	0.02000	1600	99.90%		0.27	1.20
153	DC10005	0.02000	2000	99.90%		0.34	1.50
154	DC10023	0.02000	2000	99.90%		0.34	1.50
160	BL11052	0.02000	200	99.90%		0.03	0.15
162	BL12092	0.02000	300	99.90%		0.05	0.23
163	BL01005	0.02000	1285	99.90%		0.22	0.96

51.84

*Note: Stacks 151 and 152 were changed to vent inside. The area where the mixers exhausting to stacks 151 and 152 are located is negative to the dry mix area. Therefore, the four dry mix vents include the emissions from these mixers.

Total Emissions Based on Rated Capacity at 8,760 Hours/Year

Appendix A: Process Particulate Emissions

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Pit ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

Federal Potential Emissions (tons/year)								
A. Baghouses - Previously Unpermitted								
Stack ID	Baghouse ID No.	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Total (lbs/hr)	Total (tons/yr)	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
8	DC62	0.02000	4.60	173	99.90%	0.14	0.60	0.88
20	DC04	0.02000	7.50	347	99.90%	0.45	1.95	40.04
21	DC09	0.02000	11.50	347	99.90%	0.68	3.00	40.04
37	DC37	0.02000	8.89	90	99.90%	0.14	0.60	37.77
48	DC30	0.02000	15.00	347	99.90%	0.89	3.91	40.04
55	DC50	0.02000	6.00	198	99.90%	0.20	0.89	0.82
61	DC61	0.02000	11.00	70	99.90%	0.13	0.58	14.22
66	DC17	0.02000	7.20	347	99.90%	0.43	1.88	2.91
67	DC16	0.02000	6.15	488	99.90%	0.51	2.25	2.91
68	DC15	0.02000	12.50	90	99.90%	0.19	0.84	0.88
69	DC18	0.02000	6.18	453	99.90%	0.48	2.10	2.91
71	DC24	0.02000	8.27	254	99.90%	0.36	1.58	2.91
98a	DC38	0.02000	8.10	347	99.90%	0.48	2.11	27.90
98b	DC48	0.02000	16.67	45	99.90%	0.13	0.56	27.90
104	DC12	0.02000	5.20	347	99.90%	0.31	1.35	27.90
105	DC13	0.02000	5.20	347	99.90%	0.31	1.35	27.90
108	DC36	0.02000	6.88	1,742	99.90%	2.05	9.00	2.91
137	DC53	0.02000	4.51	397	99.90%	0.31	1.34	40.04
138	DC52	0.02000	4.00	460	99.90%	0.32	1.38	22.27
139	DC54	0.02000	4.00	452	99.90%	0.31	1.36	30.51
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60	25.16
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60	
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60	
N/A	Dry Mix Vent*	0.00500	Flow rate = 8500 acfm	N/A	N/A	0.36	1.60	
B. Scrubbers - Previously Unpermitted								
Stack ID	Scrubber ID No.	Grain Loading per Actual Standard Cubic Foot of Outlet Air	Flow Rate (gpm)	Liquid to Air Ratio (gpm/1,000 acfm)	Control Efficiency	Total (lbs/hr)	Total (tons/yr)	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
52	PKL Rotoclone	0.00023	1.88	0.94	95.00%	0.00	0.02	N/A
60	BRL	0.00023	1.50	1.25	95.00%	0.00	0.01	N/A
65	C2L	0.00023	1.00	0.33	95.00%	0.01	0.03	N/A
70	C1L	0.00023	1.88	1.50	95.00%	0.00	0.01	N/A
C. Baghouses - Previously Permitted								
Stack ID	Baghouse ID No.	Grain Loading per Actual Cubic Foot of Outlet Air	Exhaust Flow Rate (acfm)	Control Efficiency		Total (lbs/hr)	Total (tons/yr)	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
150	DC01034	0.02000	1600	99.90%		0.27	1.20	27.90
153	DC10005	0.02000	2000	99.90%		0.34	1.50	19.18
154	DC10023	0.02000	2000	99.90%		0.34	1.50	19.18
160	BL11052	0.02000	200	99.90%		0.03	0.15	5.38
162	BL12092	0.02000	300	99.90%		0.05	0.23	7.37
163	BL01005	0.02000	1285	99.90%		0.22	0.96	30.51

Total Emissions Based on Rated Capacity at 8,760 Hours/Year and source controls

50.64

Note: The baghouses/dust collectors, which are part of the pneumatic conveyance system, are used to collect and return raw material and ingredients to the process. Therefore, they are considered integral to the process and are included in uncontrolled emissions.

*Note: Stacks 151 and 152 were changed to vent inside. The area where the mixers exhausting to stacks 151 and 152 are located is negative to the dry mix area. Therefore, the four dry mix vents include the emissions from these mixers. The 326 IAC 6-3-2 allowable emissions represent the total allowables for all four vents, and are based on the process weight rate of the two mixers exhausting to stacks 151 and 152.

The 326 IAC 6-3-2 allowable PM emissions are greater than the controlled emissions for each operation, therefore, all operations are in compliance with this rule.

State Potential (uncontrolled):

Baghouse (tons/yr) = No. Units * Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)

ESP (tons/yr) = No. Units * Loading (grains/acf) * Face Velocity (ft/sec) * Surface Area (ft²) * 1 lb/7,000 grains * 60 sec/min * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)

Scrubber (tons/yr) = No. Units * Loading (grains/acf) * Flow Rate (gpm) * 1/Liquid to Air Ratio (gpm/1,000 acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)

Federal Potential (controlled):

Baghouse (tons/yr) = No. Units * Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)

ESP (tons/yr) = No. Units * Loading (grains/acf) * Face Velocity (ft/sec) * Surface Area (ft²) * 1 lb/7,000 grains * 60 sec/min * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)

Scrubber (tons/yr) = No. Units * Loading (grains/acf) * Flow Rate (gpm) * 1/Liquid to Air Ratio (gpm/1,000 acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Page 2 of 9 TSD App A

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Plt ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

16.7

146.3

Heat Input Capacity includes: three (3) pest control heaters, each rated at a maximum of 2.0 MMBtu/hr, one (1) pest control heater, rated at a maximum of 0.75 MMBtu/hr, one (1) pest control heater rated at a maximum of 4.5 MMBtu/hr, and two (2) pest control heaters, each rated at a maximum of 2.725 MMBtu/hr.

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.14	0.56	0.04	7.31	0.40	6.14

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Page 3 of 9 TSD App A

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Plt ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

34.3

300.5

Heat Input Capacity includes: two (2) boilers, each with a maximum heat input capacity of 10.1 MMBtu/hr, one (1) boiler with a maximum heat input capacity of 12.5 MMBtu/hr, and one (1) boiler with a maximum heat input capacity of 1.6 MMBtu/hr.

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.29	1.14	0.09	15.02	0.83	12.62

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Page 4 of 9 TSD App A

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Pit ID: 043-00050
Reviewer: Trish Earls/EVP

326 IAC 6-2-3 Compliance Calculations for Boilers

PM Emissions shall be limited by the following:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where:

C = 50 ug/m³
a = 0.67
h = 43 feet
Q = 34.3 MMBtu/hr
N = 4 stacks

$$Pt = 0.939 \text{ lb/MMBtu}$$

However, pursuant to 326 IAC 6-2-3(d), particulate emissions from all facilities which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 lb/MMBtu. Since all four boilers were operating prior to June 8, 1972, PM emissions shall be limited to 0.8 lb/MMBtu.

Boiler #1 0.02 lb/hr of PM potential
 10.1 MMBtu/hr
 1.81E-03 lb/MMBtu (will comply)

Boiler #2 0.02 lb/hr of PM potential
 10.1 MMBtu/hr
 1.81E-03 lb/MMBtu (will comply)

Boiler #3 0.02 lb/hr of PM potential
 12.5 MMBtu/hr
 1.83E-03 lb/MMBtu (will comply)

Boiler #4 2.28E-03 lb/hr of PM potential
 1.6 MMBtu/hr
 1.43E-03 lb/MMBtu (will comply)

Appendix A: Emissions Calculations

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Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions**

Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Pit ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.536E-04	8.778E-05	5.486E-03	1.317E-01	2.487E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.657E-05	8.046E-05	1.024E-04	2.780E-05	1.536E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Flare Emissions

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Company Name: The Pillsbury Company
Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
CP: 043-10995
Plt ID: 043-00050
Reviewer: Trish Earls/EVP
Date: May 25, 1999

Heat Input Capacity MMBtu/hr	Effluent Rate scf/hr
1.0	1500

	Pollutant					
Emission Factor in lb/MMBtu	PM* 177.0 (ug/L)	PM10* 177.0 (ug/L)	SO2 0.0	NOx 0.07	VOC 0.09	CO 0.37
Potential Emission in tons/yr	0.73	0.73	0.00	0.30	0.39	1.62

Methodology

Emission Factors from AP42 13.5 - Flare Emissions

* PM/PM10 emissions based on assumption that allowable opacity is 40% and this corresponds to "average smoking flares"

177 ug/L * Ef (Effluent rate in scf/hr) * 28.3165 L/scf * g/10⁶ ug * ton/90718 g * 8760 hrs/yr = emissions (tons/yr)

MMBtu = 1,000,000 Btu

Emission (tons/yr) = Throughput (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760 hrs/hr x 1 ton/2,000 lb

Appendix A: Emission Calculations Summary

Company Name: The Pillsbury Company
 Address City IN Zip: 707 Pillsbury Lane, New Albany, Indiana 47150
 CP: 043-10995
 Plt ID: 043-00050
 Reviewer: Trish Earls/EVP
 Date: May 25, 1999

Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	Natural Gas Combustion	Flare	Conveying and Handling	Degreasing*	Welding Operation	TOTAL**
PM	0.43	0.73	51.84	0.00	0.018	53.02
PM10	1.70	0.73	51.84	0.00	0.018	54.29
SO2	0.13	0.00	0.00	0.00	0.00	0.13
NOx	22.33	0.30	0.00	0.00	0.00	22.63
VOC	1.23	0.39	0.00	0.33	0.00	1.95
CO	18.76	1.62	0.00	0.00	0.00	20.38
total HAPs	0.14	0.00	0.00	0.00	0.00	0.14
worst case single HAP	0.13	0.00	0.00	0.00	0.00	0.13

Total emissions based on rated capacity at 8,760 hours/year.

PM emissions are assumed to be equal to PM10 emissions for the conveying and handling operations.

* VOC emission factor of 0.33 tons/yr/unit for cold cleaner degreaser was obtained from USEPA's AP-42, Section 4.6, Table 4.6-2.

Controlled Emissions (tons/year)

Emissions Generating Activity

Pollutant	Natural Gas Combustion	Flare	Conveying and Handling	Degreasing	Welding Operation	TOTAL**
PM	0.43	0.73	50.64	0.00	0.018	51.82
PM10	1.70	0.73	50.64	0.00	0.018	53.09
SO2	0.13	0.00	0.00	0.00	0.00	0.13
NOx	22.33	0.30	0.00	0.00	0.00	22.63
VOC	1.23	0.39	0.00	0.33	0.00	1.95
CO	18.76	1.62	0.00	0.00	0.00	20.38
total HAPs	0.14	0.00	0.00	0.00	0.00	0.14
worst case single HAP	0.13	0.00	0.00	0.00	0.00	0.13

Total emissions based on rated capacity at 8,760 hours/year.

PM emissions are assumed to be equal to PM10 emissions for the conveying and handling operations.